

GUIDELINES for Solar Panel Projects in the Floodplain



A solar panel project should ideally be installed & placed outside of the floodplain.

If this cannot be avoided, the proposed development will need to meet certain criteria for proper installation. If the project is proposed within a floodway, a permit from the [DNR Division of Water](#) is required under the Flood Control Act. Local permitting & coordination is necessary in all floodplain situations. These projects often encompass large portion of land & have the potential to block or obstruct flood flow. Proposed security fencing around the site can also create a significant obstruction.

Current Requirements for Solar Panel Projects

Proposals in the Floodway:

1. Panels must be properly anchored to prevent collapse or movement during a flooding event.
2. Panels and all other components need to be composed of flood resistant materials.
3. Panels must be installed at or above the flood protection grade (1 foot above the BFE). This includes all electrical systems associated with the panels. All tilt positions for the panels must be at or above flood protection grade, including the lowest tilt position.
4. Hydraulic modeling or a corresponding DNR assessment worksheet must be submitted along with the project plans to properly evaluate and justify impacts within the floodway. Impacts from supporting posts, panels, and proposed fencing must be evaluated and assessed.
5. Details and plans regarding any proposed access roads or stream crossings both permanent and temporary should be included in the submittal.
6. An [Elevation Certificate](#) may be required if in the Floodway.
7. Approval from the [Army Corps of Engineers](#) may be required.
**Multiple permits will be required under the Flood Control Act if multiple waterways will be affected by the proposed project.*

Proposals in the Floodplain, outside of the Floodway:

1. Proposal outside the floodway does not require DNR approval, however elevation requirement to the flood protection grade and local floodplain permits are still required.
2. For 0.2% areas (aka. 500 yr floodplain), there are no specific requirements; however, local building permits are required.

For more information, visit
<https://dnr.mo.gov/>

Find Floodplain mapping on the Missouri Floodplain Information
Portal at: <https://msc.fema.gov/portal/home>